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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,992	06/11/2004	Sheng-Yuan Cheng	ADMP0005USA	3991
27765 7590 04/17/2007 NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			EXAMINER PARIKH, NIRANJAN S	
			ART UNIT	PAPER NUMBER
			2609	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/17/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/709,992	<b>Applicant(s)</b> CHENG, SHENG-YUAN	
	<b>Examiner</b> NIRANJAN S. PARIKH	<b>Art Unit</b> 2216	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10302003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Ginzburg et al (US PGPUB 20050053037).

#### **Claim 1**

As for the invention "Receiving the pieces of frame data of the MSDU" Ginzburg teaches (Para 0015, lines 6) receiving data by station 20 (Fig. 1) having controller (34) (Para 0018, line 2).

As per the invention "when finishing receiving each piece of frame data, even if not all the pieces of frame data of the MSDU have been received, converting the received piece of frame data into a MAC Protocol data units (MPDU) and outputting MPDU" Ginzburg teaches (1) (Para 0021, line 3-4) the controller 34 causes or control the fragmentation of the frames to be transmitted), (2) the architecture (as per schematic diagram of Fig. 2) may be included in a controller 34, (3) (Para 0022, line 6) a packet 202 or other data unit may be transmitted is passed through TX scheduler 204, TX scheduler 204 may in embodiments be software or combination hardware and

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software controller that may divide a frame or other data unit into fragments 206

(MPDU)

**Claim 2**

As for the invention "the network system is a wireless network"

Ginzburg teachings (P 1, paragraph 0001, line 12) refer to "a need to improve quality of transmissions on wireless networks in the face of noise, packet collisions and other factors."

**Claim 3**

As for the invention "the received piece of frame data is converted into the MPDU according to the IEEE 802.11 standard" Ginzburg teaches (Para 0012, lines 1-4) that the Request to Send (RTS) uses IEEE 802.11 This leads to conclude that WLAN uses 802.11 standard for every operation for wireless data communication.

So we can conclude that MSDU to MPDU conversion also uses 802.11

**Claim 4**

As for the invention "an I/O interface for receiving a MAC service data unit (MSDU) which has plurality of pieces of frame data;" Ginzburg teaches architecture of Fig. 2 is incorporated in Controller 34(Paragraphs 0022, lines 3-5). MSDU is received by controller via STATION 20 (Fig. 1). The MSDU is fragmented and converted in MPDU as explained in (paragraphs 0011, lines 5-10).

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As for the invention “a buffer for storing the pieces of frame data received by the I/O interface” Ginzburg teaches that Station 20 (Fig.1) includes storage used for buffering MSDU.

As for the invention “a control circuit for controlling operations of the network device and for converting the pieces of frame data stored in the buffer in to MAC protocol data units (MPDUs)” Ginzburg teaches (Paragraphs 0017, lines 1-2) that station 20 includes wireless communication device. Station 20 also includes controller 34 (Fig. 1), which buffers frame data from AP 10 (Fig.1) and fragments and converts MSDU into MPDU as explained in previous claim 1

#### **Claim 5**

As for the invention “The Network device comprising an antenna for wirelessly transmitting the MPDUs” Ginzburg teaches (Fig. 1) that Station 20 includes antenna 39. This antenna is used to transmit MPDUs.

#### **Claim 6**

As for the invention “converts MSDU into MPDUs according to the IEEE 802.11”

Para [0012] refers to IEEE Std. 802.11 “request to send” (RTS). This leads to conclude that WLAN uses 802.11 standard for every operation for wireless data communication.

So we can conclude that MSDU to MPDU conversion also uses 802.11

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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Niranjana S. Parikh whose telephone number is 571-270-1855. The examiner can normally be reached on Monday-Friday 7:30 am 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Garber can be reached on 571-272-2194. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NSP

  
CHARLES D. GARBER  
SUPERVISORY PATENT EXAMINER